

## Claims

What is claimed is:

1           1. A method for performing a G.HS protocol handshake session between a  
2 local device and a remote device, the method comprising:  
3           establishing an identification for the remote device;  
4           the local device generating a request signal to initiate a handshake session,  
5 the request signal including an identification signal representative of the  
6 identification;  
7           the remote device receiving the request signal;  
8           the remote device verifying the identification signal; and  
9           the remote device generating a response signal.

1           2. The method of claim 1 further comprising:  
2           establishing a local device identification for the local device; and  
3           including an identification signal representative of the local device  
4 identification in the response signal.

1           3. The method of claim 2 wherein the identification for the remote device and  
2 the local device identification are the same.

1           4. The method of claim 1 wherein the request signal includes multiple tones  
2 compatible with the G.HS protocol.

1           5. The method of claim 1 wherein the identification signal is comprised of a  
2 number of bits thereby allowing adjacent device pairs in a cable bundle to have  
3 unique identifications.

1           6. The method of claim 1 further comprising modulating the amplitude of the  
2 request signal to include the identification signal.

1           7. The method of claim 1 further comprising modulating the frequency of the  
2 request signal to include the identification signal.

1           8. The method of claim 1 further comprising configuring the request signal  
2 with differential phase reversals to include the identification signal.

1           9. The method of claim 1 further comprising configuring the request signal  
2 with an additional tone to indicate the identification signal.

1           10. A method for performing a handshake session between a local device  
2 and a remote device, the method comprising:  
3           establishing a remote identification corresponding to the remote device;  
4           establishing a local identification corresponding to the local device;  
5           the local device generating a request signal to initiate a handshake session,  
6 the request signal including a remote identification signal representative of the  
7 remote identification;  
8           the remote device receiving the request signal;  
9           the remote device verifying the remote identification signal;  
10          the remote device generating a response signal including a local identification  
11 signal representative of the local identification;  
12          the local device receiving the response signal; and  
13          the local device verifying the local identification signal.

1           11. The method of claim 10 wherein the remote and local identification  
2 signals are each comprised of a number of bits thereby allowing adjacent local-  
3 remote device pairs in a cable bundle to have unique remote and local  
4 identifications.

1           12. The method of claim 10 wherein the remote identification and the local  
2 identification are the same.

1           13. The method of claim 10 further comprising modulating the amplitude of  
2 the request and response signals to include the remote and local identification  
3 signals.

1           14. The method of claim 10 further comprising modulating the frequency of  
2 the request and response signals to include the remote and local identification  
3 signals.

1           15. The method of claim 10 further comprising configuring the request and  
2 response signals with differential phase reversals to include the remote and local  
3 identification signals.

1           16. The method of claim 10 further comprising configuring the request and  
2 response signals with an additional tone to indicate the remote and local  
3 identification signals.

1           17. The method of claim 10 wherein the remote and local identifications are  
2 selected from POTS numbers associated with the remote and local devices.

1           18. The method of claim 10 further comprising the local device sending code  
2 points to the remote device to indicate compatibility of remote and local device  
3 identification.

1           19. The method of claim 10 further comprising separating the local and  
2 remote identification signals into three octets within an identification field.

1           20. A method for performing a handshake session between a local device  
2 and a remote device, the method comprising:

3           establishing a remote identification corresponding to the remote device;

4           the remote device transmitting the remote identification to the local device  
5 upon an initial communication with the local device after installation of the remote  
6 device;

7           storing the remote identification for use by the local device in a subsequent  
8 communication with the remote device;

9           in a subsequent communication, the local device generating a request signal  
10 to initiate a handshake session, the request signal including the remote  
11 identification;

12 the remote device receiving the request signal; and  
13 the remote device verifying the remote identification signal.

1 21. The method of claim 20 wherein the remote identification is comprised of  
2 a number of bits thereby allowing adjacent device pairs in a cable bundle to have  
3 unique identifications.

1 22. The method of claim 20 further comprising:  
2 the remote device generating a response signal including a local identification  
3 corresponding to the local device;  
4 the local device receiving the response signal; and  
5 the local device verifying the local identification.

1 23. The method of claim 22 wherein the local identification and the remote  
2 identification are the same.

1 24. The method of claim 20 wherein the request signal includes multiple  
2 tones compatible with a G.HS protocol.

1 25. The method of claim 20 further comprising modulating the amplitude of  
2 the request signal to include the remote identification.

1 26. The method of claim 20 further comprising modulating the frequency of  
2 the request signal to include the remote identification.

1 27. The method of claim 20 further comprising configuring the request signal  
2 with differential phase reversals to include the remote identification.

1 28. The method of claim 20 further comprising configuring the request signal  
2 with an additional tone to indicate the remote identification.

1 29. The method of claim 20 wherein the remote identification is selected from  
2 a POTS number associate with the remote device.

1           30. The method of claim 20 further comprising the local device sending code  
2 points to the remote device to indicate compatibility of remote device identification.

1           31. The method of claim 20 further comprising separating the remote  
2 identification into three octets within an identification field.